Claims

1. A drawing furnace (10) or the like for manufacturing optical (3) fiber preferably of a vertical fiber preform (1), which drawing furnace comprises at least

- a preferably tubular heating element (12) surrounding the fiber preform (1), for heating the fiber preform,
- an outside insulating layer (13) of the heating element (12)
- a frame part (11) of the drawing furnace in order to place said heating element (12) and said insulating layer (13) in the drawing furnace (10),
- a cover part (20) in order to close the area between said heating element (12) and said frame part (11) to insulate the insulating layer (13) and/or the area surrounding the insulating layer from the gas flow (4) surrounding the fiber preform, and
- a gas tube (16) fitted between said cover part (20) and said heating element (12) in order to feed gas to the gas area surrounding the fiber preform

characterized in that the cover part (20) is further fitted mobile in relation to the frame (11) when the length of the heating element (12) changes in such a manner that a force, which is substantially constant and seals the gas tube to the end of the heating element, is directed at said gas tube in all modes of operation of the drawing furnace (10).

2. Drawing furnace (10) according to claim 1, **characterized** in that the force between the cover part (20) and the heating element (12) can be adjusted.

3. Drawing furnace (10) according to any of the preceding claims, **characterized** in that the drawing furnace comprises fastening means (22) for pressing the cover part (20) substantially with a constant force towards the heating element (12).

4. Drawing furnace (10) according to claim 3, **characterized** in that one or more springs or the like are used as fastening means (22).

5. Drawing furnace (10) according to claim 3, **characterized** in that one or more means, whose pressing force is created with gravity, are used as fastening means (22).

6. Drawing furnace (10) according to claim 1, **characterized** in that the gas tube (16) comprises one or more outer tubes (17a) and one or more inner tubes (18a, 18b) arranged inside the outer tube, which said outer tubes and inner tubes are arranged concentrically in relation to the fiber preform (1).

7. Drawing furnace (10) according to any of the preceding claims, **characterized** in that the gas flow (4) to the gas space surrounding the fiber preform (1) is arranged through the channels (17b) and the holes (18c) placed in the gas tube (16), the openings of the holes opening to said gas space symmetrically surround the fiber preform (1) substantially in a horizontal plane.

8. Drawing furnace (10) according to any of the preceding claims, **characterized** in that the gas flow (4) to the gas space surrounding the fiber preform (1) is arranged through the channels (17b) placed in the gas tube (16) and one substantially uniform and horizontal hole (18c), the opening of the hole opening to said gas space surrounds the fiber preform (1) substantially over the entire circle.

9. Drawing furnace (10) according to claim 7 or 8, **characterized** in that the holes/hole (18c) form a gas tube (16) between the first inner tube (18a) and the second inner tube (18b).

10. Drawing furnace (10) according to claim 9, **characterized** in that the dimensions of the holes/hole (18c) placed in the gas tube (16) remain substantially unchanged in all modes of operation of the drawing furnace (10).